IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

TVIPR, LLC, Plaintiff, v. SENDUM WIRELESS CORPORATION, Defendant.	Case No. Jury Trial Demanded

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, TVIPR, LLC ("TVIPR"), makes the following claims for relief against Defendant, Sendum Wireless Corporation ("Sendum"), as follows:

THE NATURE OF THE LAWSUIT

1. This is a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code § 1 *et seq*. This Court has exclusive jurisdiction over the subject matter of the Complaint for Patent Infringement under 28 U.S.C. §§ 1331 and 1338(a).

THE PARTIES

2. The plaintiff, TVIPR, LLC, is a limited liability company with its principal place of business at 4845 Pearl East Circle, Suite 101, Boulder, CO 80301.

3. TVIPR was formed as part of ThinkVillage, an intellectual property incubator that has helped individual inventors and universities develop, protect and commercialize their technologies. TVIPR focused on technologies for tracking movement and environmental conditions using electronic sensors. TVIPR owns a substantial portfolio of patent rights, including the patents-in-suit and related patent applications.

4. The defendant, Sendum Wireless Corporation ("Sendum"), is a company organized and existing under the laws of Canada, with its principal place of business at 4500 Beedie Street, Burnaby, British Columbia, Canada V5J 5L2.

THE TVIPR PATENTS-IN-SUIT

5. On December 21, 2010, United States Patent No. 7,856,339 B2, entitled, "Product Integrity Tracking Shipping Label, System and Associated Method" (hereinafter, "the '339 Patent"), was duly and legally issued by the United States Patent and Trademark Office. A copy of the '339 Patent is attached as Exhibit A.

6. On October 2, 2012, United States Patent No. 8,280,682 B2, entitled, "Device For Monitoring Movement of Shipped Goods" (hereinafter, "the '682 Patent"), was duly and legally issued by the United States Patent and Trademark Office. A copy of the '682 Patent is attached as Exhibit B.

7. On April 23, 2013, United States Patent No. 8,428,904 B2, entitled, "Product Integrity Tracking System, Shipping Label, And Associated Method" (hereinafter, "the '904 Patent"), was duly and legally issued by the United States Patent and Trademark Office. A copy of the '904 Patent is attached as Exhibit C.

8. On February 25, 2014, United States Patent No. 8,660,814 B2, entitled, "Package Management System For Tracking Shipment And Product Integrity" (hereinafter, "the '814 Patent"), was duly and legally issued by the United States Patent and Trademark Office. A copy of the '814 Patent is attached as Exhibit D.

9. On February 23, 2016, United States Patent No. 9,267,793 B2, entitled, "Movement Monitoring Device For Attachment To Equipment" (hereinafter, the '793 Patent"), was duly and

legally issued by the United States Patent and Trademark Office. A copy of the ‘793 Patent is attached as Exhibit E.

10. The ‘339 Patent, ‘682 Patent, ‘904 Patent, ‘814 Patent and ‘793 Patent will be collectively referred to as the “TVIPR Patents.” TVIPR is the owner by assignment of all right, title and interest in and to the TVIPR Patents. TVIPR has the exclusive right to license and enforce the TVIPR Patents and to collect damages for infringement, and has standing to sue for infringement of the TVIPR Patents.

11. Generally speaking, the TVIPR Patents relate to methods, systems and devices for tracking the movement and/or environmental condition of packages or items that are being transported or shipped, including without limitation, tracking when a movement or environmental condition has reached a selected threshold. Movement conditions can include, for example, “… airtime, speed, power, impact, drop distance, jarring and spin.” (*See, e.g.*, Ex. B, ‘682 Patent at 5:7-8). Environment conditions can include, for example, “… temperature, humidity, moisture, altitude and pressure.” (*See, e.g.*, *Id.*, at 6:26-27). In one aspect of the movement monitoring devices disclosed in the TVIPR Patents, the movement or environment conditions can be monitored for “events” where a condition crosses, exceeds or drops below a threshold or value. (*See, e.g.*, *Id*, at 6:36-38). The movement monitoring device may communicate data to a remote receiver “… either (a) upon the occurrence of an ‘event’ or (b) in repeated time intervals, e.g., once every ten minutes.” (*See, e.g.*, *Id.*, at 3:5-8). As an alternative, the movement monitoring device may respond to a request from a remote receiver. (*See, e.g.*, *Id*. at 3:8-11).

JURISDICTION AND VENUE

12. This Court has personal jurisdiction over Sendum by virtue of its tortious acts of patent infringement which have been committed in the State of Illinois and in this Judicial District, and by virtue of its transaction of business in the State of Illinois.

13. Sendum transacts business in Illinois with respect to at least the PT300 and PT300D devices accused of infringement in this case.

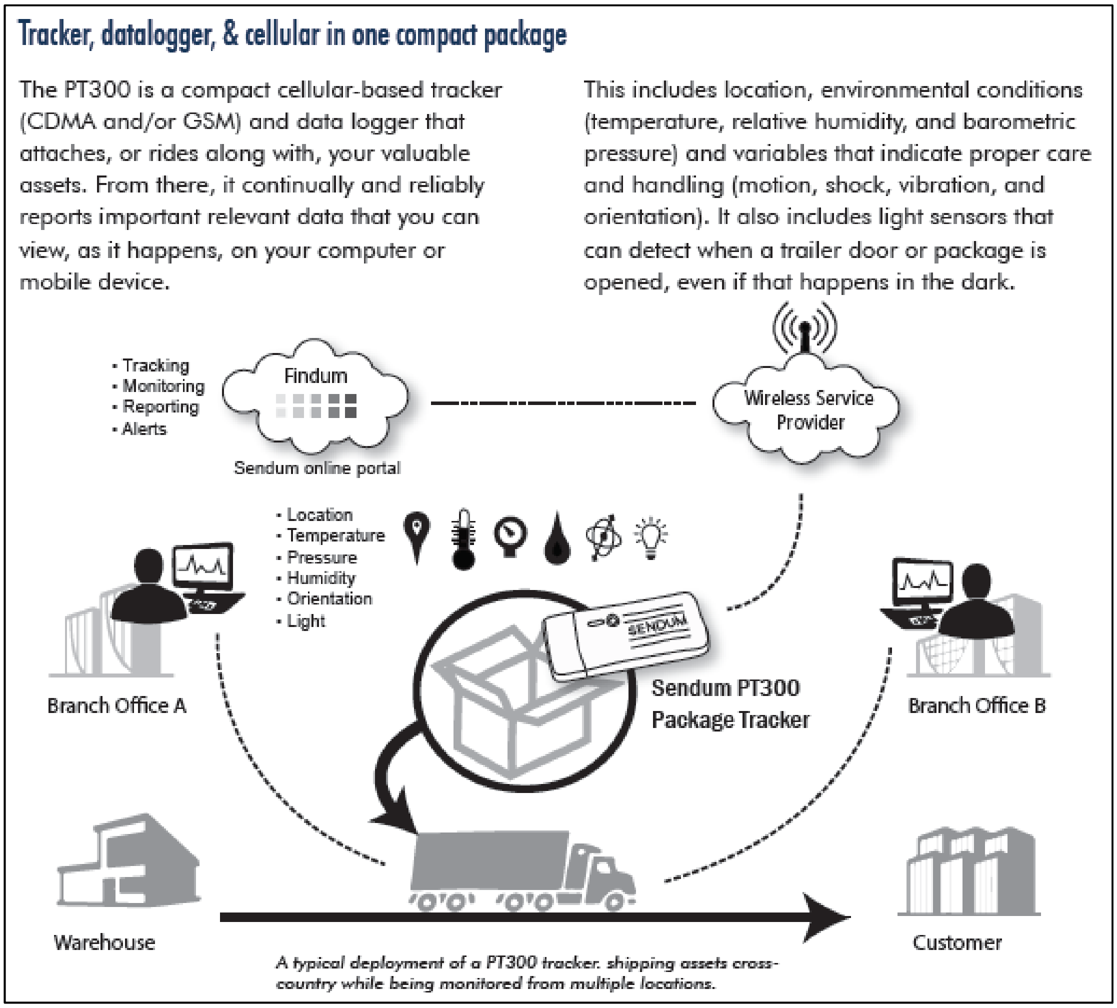
14. For example, Sendum has entered into an arrangement with United Airlines, which is headquartered in Illinois, to allow Sendum tracking devices, including the PT300 and PT300D devices accused of infringement in this case, to be used on United's cargo aircraft. Sendum has partnered with Barcoding Incorporated which has its technology integration center in Oak Brook Terrace, Illinois and its Chicago office in Mundelein, Illinois. Sendum has also entered into an arrangement with Delta Air Lines that allows for the use of the Sendum PT300D device accused of infringement in this case to be used on Delta Air Lines cargo flights that arrive at O'Hare International Airport located in Chicago, Illinois. Sendum has also sponsored and attended trade shows in Chicago, Illinois where it has advertised, marketed, promoted and offered for sale its wireless tracking products, including the PT300 and PT300D tracking devices that are accused of infringement in this case.

15. Sendum has also sponsored, exhibited at and attended the 11th Annual Cold Chain Global Forum that was held at the Hyatt Regency McCormick Place in Chicago, Illinois from September 30 to October 4, 2013. Sendum is also sponsoring the upcoming 15th Annual Cold Chain Global Forum scheduled to be held at Hyatt Regency McCormick Place in Chicago, Illinois in September 2017.

16. Venue is proper in this Judicial District pursuant to 28 U.S.C. § 1391 and 28 U.S.C. § 1400(b).

THE ACCUSED SENDUM PT300 & PT300D TRACKING DEVICES

17. Sendum's PT300 and PT300D are compact cellular-based trackers and data loggers that can attach to assets to be tracked or monitored. The PT300 uses Code Division Multiple Access (CDMA) as its cellular communication technology whereas the PT300D tracker can use both CDMA and Global Systems for Mobile (GSM):


Tracker, datalogger, & cellular in one compact package
The PT300 is a compact cellular-based tracker (CDMA and/or GSM) and data logger that attaches, or rides along with, your valuable assets. From there, it continually and reliably reports important relevant data that you can view, as it happens, on your computer or mobile device.
This includes location, environmental conditions (temperature, relative humidity, and barometric pressure) and variables that indicate proper care and handling (motion, shock, vibration, and orientation). It also includes light sensors that can detect when a trailer door or package is opened, even if that happens in the dark.
• Tracking
• Monitoring
• Reporting
• Alerts
Findum
Sendum online portal
Wireless Service Provider
• Location
• Temperature
• Pressure
• Humidity
• Orientation
• Light
Branch Office A
Sendum PT300 Package Tracker
Branch Office B
Warehouse
Customer
A typical deployment of a PT300 tracker. shipping assets cross-country while being monitored from multiple locations.

Sendum PT300 Tracking System Brochure, p. 3.

18. Both the PT300 and PT300D devices have sensors that are able to track location, sense movement, gauge orientation, and detect GPS jamming. Additional sensors can be used with either the PT300 or PT300D to sense temperature, relative humidity, biometric pressure, and/or ambient and infrared light:

> **Multiple Sensor Options**
>
> Many sensing options are available with the PT300 tracking system.
>
> Common to all configurations is the ability to track location, sense movement, gauge orientation, and detect GPS jamming. Additional sensors include temperature, relative humidity, barometric pressure, and ambient and infrared light. So you can know not only where your package is but under what conditions it is being subjected to and how it is being treated. With each sensor, you can set up alerts based on threshold values, get up-to-the-minute readings, view graphs, and generate reports.

Sendum PT300 Tracking System Brochure, p. 4.

19. Both the PT300 and PT300D devices provide alerts based on reaching, exceeding or falling below configurable threshold values (e.g., maximum or minimum values):

Sendum Wireless Corporation Findum User Guide - 1

Rules

If you want to be notified when any measured parameter on your device (such as temperature or battery level) goes outside of acceptable limits, the Rules function is where you start.

View by: Live History Configuration Rules Reports

Rules are configurable thresholds that apply to a set of measured variables for a specific device. These variables include temperature, relative humidity, battery level, and orientation and are dependent on what type of device you are using (i.e. not all devices measure the same parameters). Once the thresholds are set, they determine under what conditions automatic email or text alerts are sent.

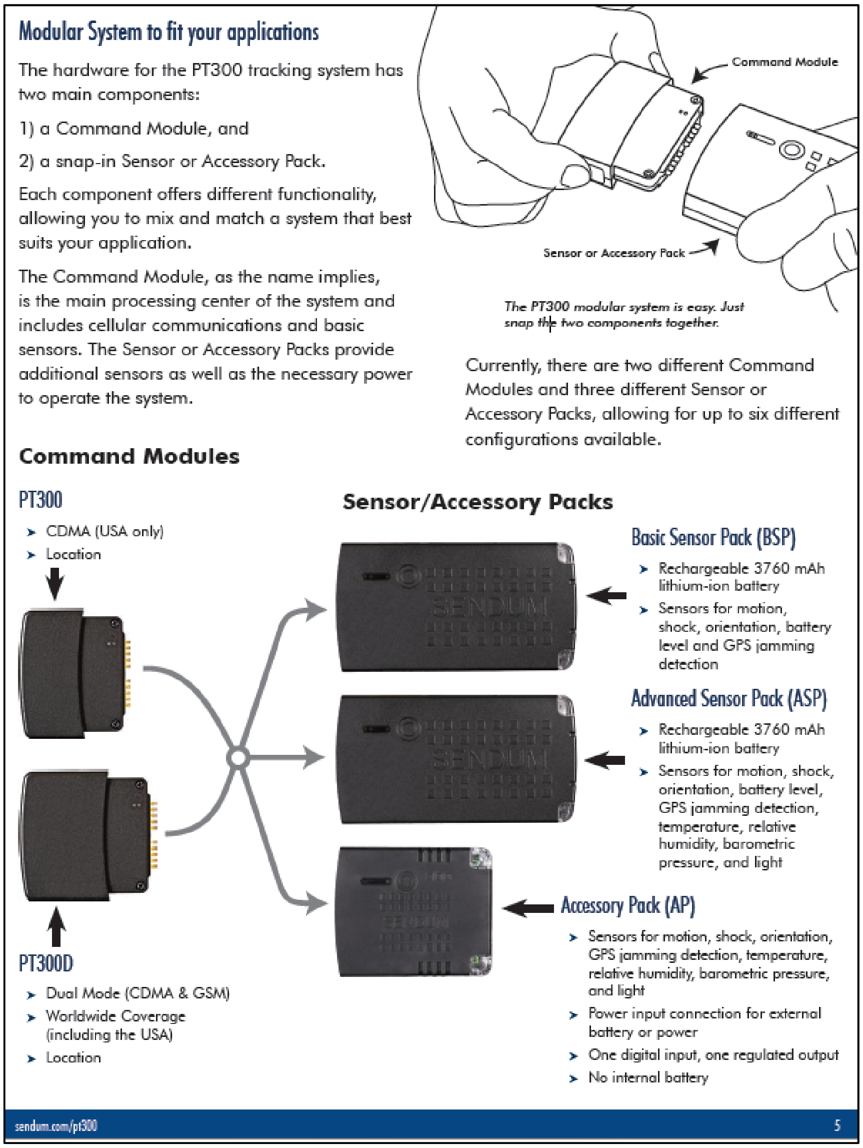
Note that simply setting Rules does not ensure that you will receive Automatic notifications. You also have to configure your email and text alerts (refer to Settings>Notifications), and you also have to configure how often you want your device to poll data (see Configuration and Alarm Check).

To set up Rules for your device:

1. From the Device Details screen, click on the "Rules" button in the upper right-hand corner of the screen. The Rules page will load.
2. From the Rules page, you can set the rules for when alarms are sent about the device functionality. Battery, humidity, temperature, pressure, light, and tilt are some of the metrics available for which rules can be set. Each of these metrics is set to alert the user when the data received falls below the set threshold. Each threshold is set by utilizing a slide-bar located directly beneath the metric name.

Findum User Guide, 2016/09/27 Update, Page 53 of 189.

20. Both the PT300 and PT300D devices have two main hardware components: (a) a command module, and (b) a snap-in sensor or accessory pack. The PT300 and PT300D command modules, when combined with the Basic Sensor Pack, contain a GPS chip for location, a motion sensor, an orientation sensor and a GPS jamming detector. When using the Advanced Sensor Pack or the Accessory Pack with the command modules instead of the Basic Sensor Pack, a temperature sensor, relative humidity sensor and barometric pressure sensor are added:



Modular System to fit your applications

The hardware for the PT300 tracking system has two main components:

1) a Command Module, and

2) a snap-in Sensor or Accessory Pack.

Each component offers different functionality, allowing you to mix and match a system that best suits your application.

The Command Module, as the name implies, is the main processing center of the system and includes cellular communications and basic sensors. The Sensor or Accessory Packs provide additional sensors as well as the necessary power to operate the system.

The PT300 modular system is easy. Just snap the two components together.

Currently, there are two different Command Modules and three different Sensor or Accessory Packs, allowing for up to six different configurations available.

Command Modules

PT300
- CDMA (USA only)
- Location

PT300D
- Dual Mode (CDMA & GSM)
- Worldwide Coverage (including the USA)
- Location

Sensor/Accessory Packs

Basic Sensor Pack (BSP)
- Rechargeable 3760 mAh lithium-ion battery
- Sensors for motion, shock, orientation, battery level and GPS jamming detection

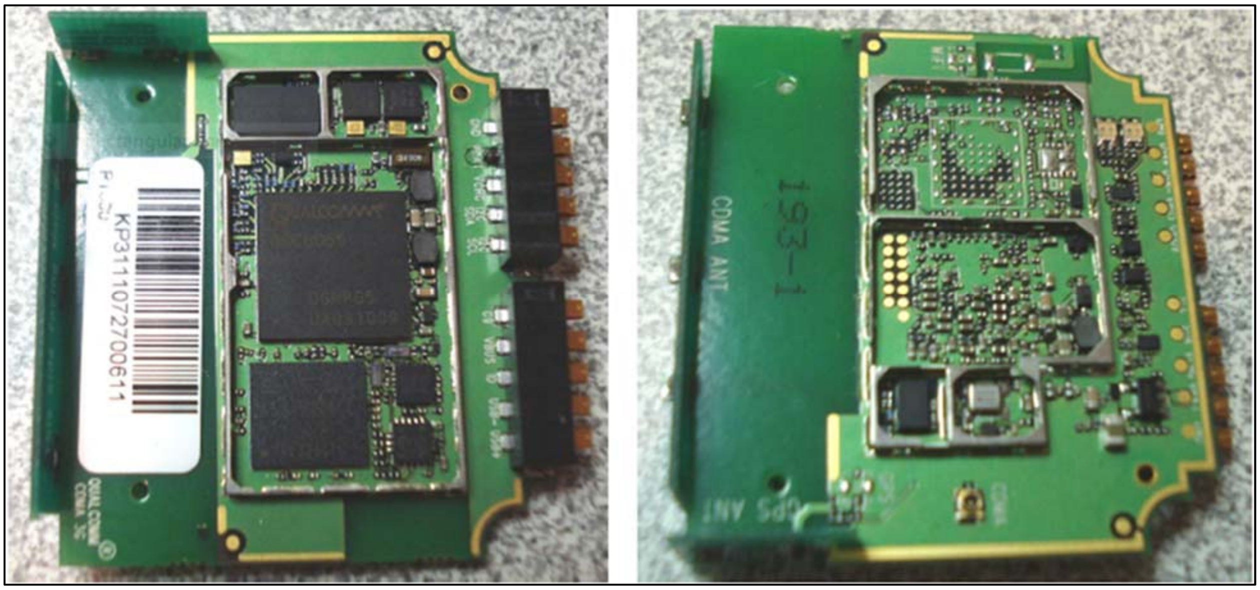
Advanced Sensor Pack (ASP)
- Rechargeable 3760 mAh lithium-ion battery
- Sensors for motion, shock, orientation, battery level, GPS jamming detection, temperature, relative humidity, barometric pressure, and light

Accessory Pack (AP)
- Sensors for motion, shock, orientation, GPS jamming detection, temperature, relative humidity, barometric pressure, and light
- Power input connection for external battery or power
- One digital input, one regulated output
- No internal battery

sendum.com/pt300 5

Sendum PT300 Tracking System Brochure, p. 5.

21. The PT300 and PT300 devices have transmitters that can transmit signals indicating data sensed or generated by the sensors in the PT300 and PT300D devices over cellular communication networks to a server operated by Sendum:



Sendum PT300 Internal Photos Submitted To FCC, FCC ID # TS5-6055M-PT300.

22. The Findum server operated by Sendum receives the data generated by the sensors in the PT300 and PT300D tracking devices, and reports the data to customers through a web-based Internet application called Findum. *See, e.g.*, https://sendum.com/findum-software.html; *See, e.g.*, https://findum.sendum.com/#login/1.

23. Sendum's Findum software operates as an online portal that allows customers to log in remotely to monitor, manage and access reports on the PT300 and PT300D tracking devices. Findum also allows customers to configure the PT300 and PT300D tracking devices remotely to do the following: (a) set up a schedule for the tracking devices to sense and report their location; (b) define and manage geofences for the tracking devices; (c) configure the sensors in the tracking devices to measure specific movement and environmental characteristics and set a schedule for the tracking devices to report the data generated by the sensors; (d) set up thresholds based on the

measurements generated by the sensors and configure alarms based on whether a threshold has been met or exceeded; and (e) configure the tracking devices schedule for sleeping or waking up.

TVIPR'S PRESUIT NOTICE AND COMMUNICATIONS TO SENDUM

24. On February 6, 2017, TVIPR sent a letter to Sendum that provided notice of the TVIPR Patents and their relevance to Sendum's PT300 tracking system, including the PT300 and PT300D tracking devices. Included with the letter were detailed claim charts that explained how claims of the TVIPR Patents cover the PT300 and PT300D tracking devices. In the letter, TVIPR also expressed a willingness to grant rights to Sendum under the TVIPR Patents.

25. After not receiving a response to its letter, TVIPR sent a follow-up letter to Sendum on March 13, 2017 requesting that Sendum respond to TVIPR's offer to obtain rights under the TVIPR Patents, and further offered to answer any questions that Sendum may have relating to the TVIPR Patents. To date, TVIPR has received no response from Sendum.

26. Sendum has been aware of the TVIPR Patents and of its infringement of the TVIPR Patents with respect to the PT300 and PT300D tracking devices at least since it received TVIPR's letter on or about February 8, 2017.

COUNT I
SENDUM'S INFRINGEMENT OF THE '339 PATENT

27. TVIPR realleges and incorporates by reference as if fully set forth herein the allegations contained in paragraphs 1 through 26, above.

28. Sendum has infringed and continues to infringe, directly and indirectly, at least claims 10, 12, 13 and 14 of the '339 Patent, either literally or under the doctrine of equivalents, by selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices that infringe at least claims 10, 12, 13 and 14 of the '339 Patent.

29. Sendum sells, offers for sale in the United States, and imports into the United States, the PT300 tracking device.

30. Sendum sells, offers for sale in the United States, and imports into the United States, the PT300D tracking device.

31. The PT300 and PT300D tracking devices have at least one sensor for sensing movement.

32. The PT300 and PT300D tracking devices have at least one sensor for sensing motion, shock or orientation.

33. The PT300 and PT300D tracking devices have configurable thresholds that apply to a set of measured variables such as orientation or tilt.

34. The PT300 and PT300D tracking devices provide a configurable threshold for a measured variable involving a movement such as tilt and, if the amount of measured tilt exceeds the threshold, then an alarm is sent:

> **Source Based Time Average output power analysis:**
>
> **Operation Condition:**
> In a typical operation condition the CDMA radio is in sleep mode until a alarm situation arises. These alarm conditions can be triggered by one of several sensors in the battery pack. These sensors sense vibration, tilt, temperature, light, battery level, humidity, pressure. Once the alarm is triggered, the radio wakes up and start GPS tracking by turning on the GPS receiver and reports the location through the CDMA wide area network to the host. The duty cycle of the CDMA transceiver and the GPS receiver depends on the application. Due to the limitations on battery life requirement the reporting period is limited to a maximum of once per hour. Each report will typical take in the order of 5-10s. There is also a hard duty cycle limit of 80s/hr by the carriers.

PT300 Power Analysis submitted to FCC; FCC ID: # TS5-6055M-PT300.

35. Sendum provides user manuals, user guides and quick start guides for the PT300 and PT300D tracking devices.

36. Sendum instructs its customers and users of its PT300 and PT300D tracking devices how to use the tracking devices to track valuable packages or assets.

37. Sendum instructs its customers and users of its PT300 and PT300D tracking devices how to attach the tracking devices to a product or package containing the product.

38. Sendum instructs its customers and users of its PT300 and PT300D tracking devices how to configure thresholds for variables such as orientation or tilt such that if the variable exceeds a set threshold, an alarm is sent.

39. Sendum intends for its customers and users of its PT300 and PT300D tracking devices to follow the instructions for use provided by Sendum.

40. Sendum has directly infringed and continues to directly infringe at least claims 10, 12, 13 and 14 of the '339 Patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by selling, offering to sell and/or importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack.

41. Sendum has knowingly and actively induced infringement of at least claims 10, 12, 13 and 14 of the '339 Patent under 35 U.S.C. § 271(b) by, among other things, selling, offering for sale and importing into the United States the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, encouraging, instructing and aiding others to use them in an infringing manner. Such direct infringers include customers such as security professionals, logistics professionals, quality professionals, regulatory professionals and customer service professionals that track products, including customers who use the PT300 and PT300D tracking devices to track products being shipped through United Airlines cargo. *See, e.g.*,

https://sendum.com/pt300-package-tracker/who-buys.html and https://sendum.com/pt300-package-tracker/airline-approvals.html. Sendum has had actual notice of its infringement of the '339 Patent by no later than February 8, 2017 when it received TVIPR's letter advising Sendum of the '339 Patent and providing a detailed claim chart applying the '339 Patent to Sendum's PT300 line of tracking devices. Sendum has acted with specific intent to induce infringement.

42. Sendum has contributed to the infringement of at least claims 10, 12, 13 and 14 of the '339 Patent under 35 U.S.C. § 271(c) by, among other things, selling, offering for sale and importing into the United States the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, encouraging, instructing and aiding others to use them in an infringing manner. Sendum has engaged in these activities knowing that the PT300 and PT300D tracking devices are especially made and adapted for use, and are in fact used, in a manner that constitutes infringement of the '339 Patent. The PT300 and PT300D tracking devices constitute material parts of the inventions described and claimed in the '339 Patent. The PT300 and PT300D tracking devices are not staple articles or commodities of commerce that are suitable for substantial non-infringing uses.

43. To the extent required by law, TVIPR has complied with the provisions of 35 U.S.C. § 287 with respect to the '339 Patent.

44. Sendum's infringement of the '339 Patent has injured, and continues to injure, TVIPR.

45. Sendum's infringement of the '339 Patent has been and continues to be willful, wanton, malicious, in bad faith, deliberate, consciously wrong and/or flagrant. Specifically, Sendum has sold, offered for sale and imported into the United States the PT300 and PT300D

tracking devices, has encouraged, instructed and aided others to use the PT300 and PT300D tracking devices in an infringing manner, and has especially made and adapted for use the PT300 and PT300D devices in an infringing manner, although Sendum knew that its actions would constitute and result in infringement of the ‘339 Patent. Accordingly, this constitutes an egregious case of infringement typified by willful misconduct.

46. TVIPR is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

47. TVIPR will continue to be injured unless and until this Court enters an injunction prohibiting further infringement, inducement of infringement and contributory infringement.

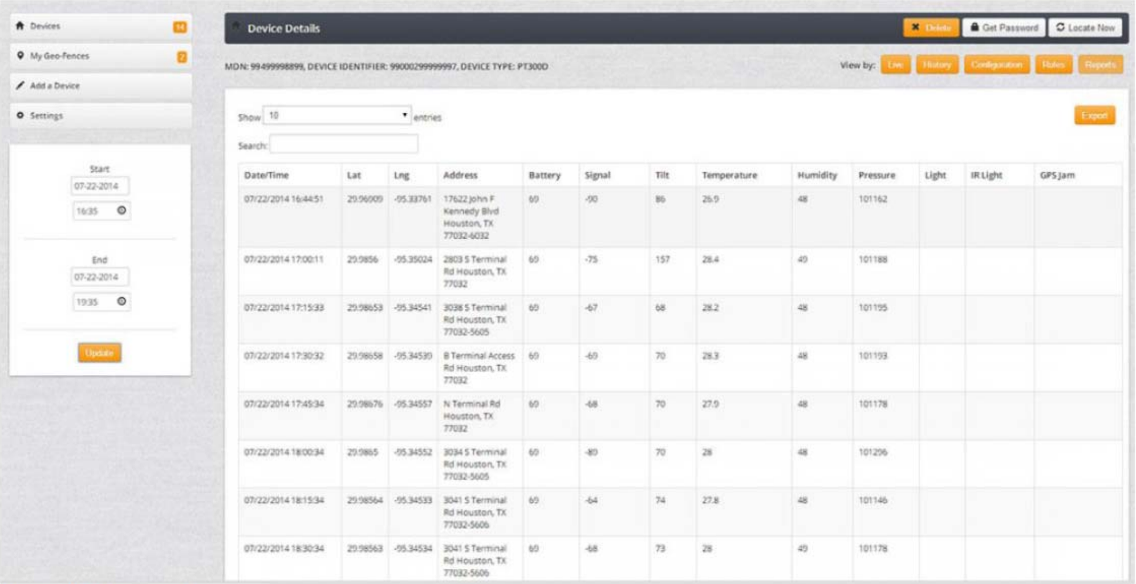
COUNT II
SENDUM’S INFRINGEMENT OF THE ‘682 PATENT

48. TVIPR realleges and incorporates by reference as if fully set forth herein the allegations contained in paragraphs 1 through 47, above.

49. Sendum has infringed and continues to infringe, directly and indirectly, at least claims 1, 5, 7, 8, 9, 18, 19, 21, 22, 26, 29, 30 and 31 of the ‘682 Patent, either literally or under the doctrine of equivalents, by selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices that infringe at least claims 1, 5, 7, 8, 9, 18, 19, 21, 22, 26 29, 30 and 31 of the ‘682 Patent.

50. The PT300 and PT300D tracking devices contain a clock.

51. The PT300 and PT300D tracking devices have a processor that processes the signal generated by the sensor sensing movement such as tilt and time tags the movement event with the time of occurrence from the clock:


Devices
My Geo-Fences
Add a Device
Settings
Start
07-22-2014
16:35
End
07-22-2014
19:35
Update
Device Details
Delete
Get Password
Locate Now
MDN: 99499998899, DEVICE IDENTIFIER: 99000299999997, DEVICE TYPE: PT300D
View by:
Live
History
Configuration
Rules
Reports
Show 10 entries
Export
Search:

Date/Time	Lat	Lng	Address	Battery	Signal	Tilt	Temperature	Humidity	Pressure	Light	IR Light	GPS Jam
07/22/2014 16:44:51	29.96009	-95.33761	17622 John F Kennedy Blvd Houston, TX 77032-6032	60	-90	86	26.9	48	101162			
07/22/2014 17:00:11	29.9856	-95.35024	2803 S Terminal Rd Houston, TX 77032	60	-75	157	28.4	49	101188			
07/22/2014 17:15:33	29.98653	-95.34541	3038 S Terminal Rd Houston, TX 77032-5605	60	-67	68	28.2	48	101195			
07/22/2014 17:30:32	29.98658	-95.34539	B Terminal Access Rd Houston, TX 77032	60	-69	70	28.3	48	101193			
07/22/2014 17:45:34	29.98676	-95.34557	N Terminal Rd Houston, TX 77032	60	-68	70	27.9	48	101178			
07/22/2014 18:00:34	29.9865	-95.34552	3034 S Terminal Rd Houston, TX 77032-5605	60	-80	70	28	48	101296			
07/22/2014 18:15:34	29.98564	-95.34533	3041 S Terminal Rd Houston, TX 77032-5606	60	-64	74	27.8	48	101146			
07/22/2014 18:30:34	29.98563	-95.34534	3041 S Terminal Rd Houston, TX 77032-5606	60	-68	73	28	49	101178			

Sample Device Report

Findum User Guide, 2016/09/27, p. 58 of 189.

52. The PT300 and PT300D tracking devices contain a GPS chip for locating the tracking device.

53. The PT300 and PT300D tracking devices have a communication port that can communicate each movement event tagged with the time of occurrence information and location information to a receiver remote from the device.

54. The PT300 and PT300D tracking devices can transmit data at the time of events and at preselected time intervals.

55. The PT300 and PT300D tracking devices can transmit data in near real time.

56. The PT300 and PT300D tracking devices can transmit time-tagged data to a receiver when the movement level exceeds a predetermined threshold.

57. The PT300 and PT300D tracking devices when used with the Advanced Sensor Pack or Accessory Pack contain sensors that are capable of sensing temperature and relative humidity.

58. The PT300 and PT300D tracking devices wirelessly transmit time-tagged events to a remote receiver.

59. The PT300 and PT300D tracking devices transmit time-tagged events that include the time and date of occurrence.

60. Sendum has directly infringed and continues to directly infringe at least claims 1, 5, 7, 8, 9, 18, 19, 21, 22, 26, 29, 30 and 31 of the ‘682 Patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by selling, offering to sell in the United States, and/or importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack.

61. Sendum has actively induced infringement of at least claims 1, 5, 7, 8, 9, 18, 19, 21, 22, 26, 29, 30 and 31 of the ‘682 Patent under 35 U.S.C. § 271(b) by, among other things, selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, instructing and aiding others to use them in an infringing manner. Such direct infringers include customers such as security professionals, logistics professionals, quality professionals, regulatory professionals and customer service professionals that track products, including customers who use the PT300 and PT300D tracking devices to track products being shipped through United Airlines cargo. *See, e.g.,* https://sendum.com/pt300-package-tracker/who-buys.html and

https://sendum.com/pt300-package-tracker/airline-approvals.html. Sendum has had actual notice of its infringement of the ‘682 Patent by no later than February 8, 2017 when it received TVIPR’s letter advising Sendum of the ‘682 Patent and providing a detailed claim chart applying the ‘682 Patent to Sendum’s PT300 line of tracking devices. Sendum has acted with specific intent to induce infringement.

62. Sendum has contributed to the infringement of at least claims 1, 5, 7, 8, 9, 18, 19, 21, 22, 26, 29, 30 and 31 of the ‘682 Patent under 35 U.S.C. § 271(c) by, among other things, selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, encouraging, instructing and aiding others to use the PT300 and PT300D tracking devices in an infringing manner. Sendum has engaged in these activities knowing that the PT300 and PT300D tracking devices are especially made and adapted for use, and are in fact used, in a manner that constitutes infringement of the ‘682 Patent. The PT300 and PT300D tracking devices constitute material parts of the inventions described and claimed in the ‘682 Patent. The PT300 and PT300D tracking devices are not staple articles or commodities of commerce that are suitable for substantial non-infringing uses.

63. To the extent required by law, TVIPR has complied with the provisions of 35 U.S.C. § 287 with respect to the ‘682 Patent.

64. Sendum’s infringement of the ‘682 Patent has injured, and continues to injure, TVIPR.

65. Sendum’s infringement of the ‘682 Patent has been and continues to be willful, wanton, malicious, in bad faith, deliberate, consciously wrong and/or flagrant. Specifically,

Sendum has sold, offered for sale and imported into the United States the PT300 and PT300D tracking devices, has encouraged, instructed and aided others to use the PT300 and PT300D tracking devices in an infringing manner, and has especially made and adapted for use the PT300 and PT300D devices in an infringing manner, although Sendum knew that its actions would constitute and result in infringement of the ‘682 Patent. Accordingly, this constitutes an egregious case of infringement typified by willful misconduct.

66. TVIPR is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

67. TVIPR will continue to be injured unless and until this Court enters an injunction prohibiting further infringement, inducement of infringement and contributory infringement.

COUNT III
SENDUM’S INFRINGEMENT OF THE ‘904 PATENT

68. TVIPR realleges and incorporates by reference as if fully set forth herein the allegations contained in paragraphs 1 through 67, above.

69. Sendum has infringed and continues to infringe, directly and indirectly, at least claims 1, 2, 4, 12, 13 and 14 of the ‘904 Patent, either literally or under the doctrine of equivalents, by selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices that infringe at least claims 1, 2, 4, 12, 13 and 14 of the ‘904 Patent.

70. The PT300 and PT300D tracking devices includes a movement monitoring device that can attach to a product to be shipped or to packaging containing the product:

> **Tracker, datalogger, & cellular in one compact package**
>
> The PT300 is a compact cellular-based tracker (CDMA and/or GSM) and data logger that attaches, or rides along with, your valuable assets. From there, it continually and reliably reports important relevant data that you can view, as it happens, on your computer or mobile device.
>
> This includes location, environmental conditions (temperature, relative humidity, and barometric pressure) and variables that indicate proper care and handling (motion, shock, vibration, and orientation). It also includes light sensors that can detect when a trailer door or package is opened, even if that happens in the dark.

Sendum PT300 Tracking System Brochure, p. 3.

71. The PT300 and PT300D tracking devices have a detector that detects movement of the tracking devices such as motion, vibration, orientation or tilt.

72. The PT300 and PT300D tracking devices have a processor that communicates with the detector and time tags the movement detected when it crosses a threshold.

73. The PT300 and PT300D tracking devices have memory.

74. The PT300 and PT300D tracking devices have memory that store time-tagged events such as when the device tilt has exceeded a configurable threshold.

75. The PT300 and PT300 tracking devices have transmitters that wirelessly transmit signals indicating time-tagged events such as when the device tilt has exceeded a configurable threshold.

76. The PT300 and PT300 tracking devices have accelerometers.

77. The PT300 and PT300 tracking devices have accelerometers that measure acceleration.

78. The PT300 and PT300 tracking devices have GPS receivers for determining a location of the device. The location information is associated with time-tagged events such as

when the device tilt has exceeded a configurable threshold to identify where an above threshold event occurred.

79. Sendum has directly infringed and continues to directly infringe at least claims 1, 2, 4, 12, 13 and 14 of the ‘904 Patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by selling, offering to sell in the United States, and/or importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack.

80. Sendum has actively induced infringement of at least claims 1, 2, 4, 12, 13 and 14 of the ‘904 Patent under 35 U.S.C. § 271(b) by, among other things, selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, instructing and aiding others to use them in an infringing manner. Such direct infringers include customers such as security professionals, logistics professionals, quality professionals, regulatory professionals and customer service professionals that track products, including customers who use the PT300 and PT300D tracking devices to track products being shipped through United Airlines cargo. *See, e.g.*, https://sendum.com/pt300-package-tracker/who-buys.html and https://sendum.com/pt300-package-tracker/airline-approvals.html. Sendum has had actual notice of its infringement of the ‘904 Patent by no later than February 8, 2017 when it received TVIPR’s letter advising Sendum of the ‘904 Patent and providing a detailed claim chart applying the ‘904 Patent to Sendum’s PT300 line of tracking devices. Sendum has acted with specific intent to induce infringement.

81. Sendum has contributed to the infringement of at least claims 1, 2, 4, 12, 13 and 14 of the ‘904 Patent under 35 U.S.C. § 271(c) by, among other things, selling, offering for sale in

the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, encouraging, instructing and aiding others to use the PT300 and PT300D tracking devices in an infringing manner. Sendum has engaged in these activities knowing that the PT300 and PT300D tracking devices are especially made and adapted for use, and are in fact used, in a manner that constitutes infringement of the '904 Patent. The PT300 and PT300D tracking devices constitute material parts of the inventions described and claimed in the '904 Patent. The PT300 and PT300D tracking devices are not staple articles or commodities of commerce that are suitable for substantial non-infringing uses.

82. To the extent required by law, TVIPR has complied with the provisions of 35 U.S.C. § 287 with respect to the '904 Patent.

83. Sendum's infringement of the '904 Patent has injured, and continues to injure, TVIPR.

84. Sendum's infringement of the '904 Patent has been and continues to be willful, wanton, malicious, in bad faith, deliberate, consciously wrong and/or flagrant. Specifically, Sendum has sold, offered for sale and imported into the United States the PT300 and PT300D tracking devices, has encouraged, instructed and aided others to use the PT300 and PT300D tracking devices in an infringing manner, and has especially made and adapted for use the PT300 and PT300D devices in an infringing manner, although Sendum knew that its actions would constitute and result in infringement of the '904 Patent. Accordingly, this constitutes an egregious case of infringement typified by willful misconduct.

85. TVIPR is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

86. TVIPR will continue to be injured unless and until this Court enters an injunction prohibiting further infringement, inducement of infringement and contributory infringement.

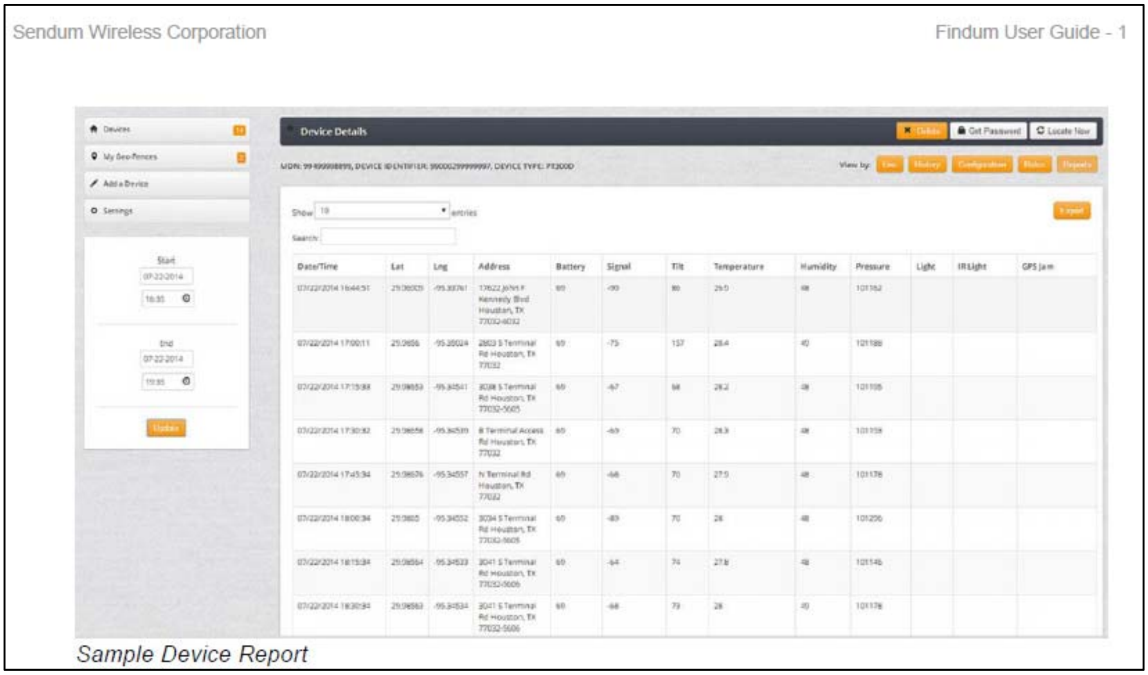
COUNT IV
SENDUM'S INFRINGEMENT OF THE '793 PATENT

87. TVIPR realleges and incorporates by reference as if fully set forth herein the allegations contained in paragraphs 1 through 86, above.

88. Sendum has infringed and continues to infringe, directly and indirectly, at least claims 1, 2, 4, 11, 13 and 14 of the '793 Patent, either literally or under the doctrine of equivalents, by selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices that infringe at least claims 1, 2, 4, 11, 13 and 14 of the '793 Patent.

89. The PT300 and PT300D tracking devices have a housing that has an integrated circuit with a detector that can detect movement and a processor that can process the data detected by the detector and determine what type of movement occurred.

90. The PT300 and PT300D tracking devices have a transmitter communicatively coupled with the integrated circuit that communicates events to a remote receiver:



Sample Device Report

Findum User Guide, 2016/09/27, p. 58 of 189. See, also:

DECLARATION OF COMPLIANCE		RF MEASUREMENT REPORT		FCC & IC
Test Lab Information	Name	CELLTECH LABS INC.		
	Address	21-364 Lougheed Road, Kelowna B.C. V1X 7R8 Canada		
Test Lab Registration No.(s)	ISO 17025	A2LA Test Lab Certificate No. 2470.01		
	IC	3874A-1		
Applicant Information	Name	SENDUM WIRELESS CORPORATION		
	Address	4500 Beedie Street, Burnaby, B.C. V5J 5L2 Canada		
Standard(s) & Procedure(s)	FCC	47 CFR Part 2	47 CFR Part 22 Subpart H	47 CFR Part 24 Subpart E
	IC	RSS-132 Issue 2	RSS-133 Issue 5	RSS-Gen Issue 3
	ANSI	TIA/EIA-603-C-2004		
Device Classification(s)	FCC	PCS Licensed Transmitter (PCB)		47 CFR §24(E)
	IC	2 GHz Personal Communication Services		RSS-133 Issue 5

Sendum RF Test Report for PT300 Submitted To FCC, FCC ID # TS5-6055M-PT300, p. 1 of 34

91. The PT300 and PT300D tracking devices can transmit data at repeated time intervals.

92. The PT300 and PT300D tracking devices including, specifically, the Advanced Sensor Pack or the Accessory Pack, have a temperature sensor and a relative humidity sensor.

93. Sendum has directly infringed and continues to directly infringe at least claims 1, 2, 4, 11, 13 and 14 of the '793 Patent under 35 U.S.C. § 271(a), either literally and/or under the doctrine of equivalents, by selling, offering to sell in the United States, and/or importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack.

94. Sendum has actively induced infringement of at least claims 1, 2, 4, 11, 13 and 14 of the '793 Patent under 35 U.S.C. § 271(b) by, among other things, selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, instructing and aiding others to use them in an infringing manner. Such direct infringers include customers such as security professionals, logistics professionals, quality professionals, regulatory professionals and customer service professionals that track products, including customers who use the PT300 and PT300D tracking devices to track products being shipped through United Airlines cargo. *See, e.g.*, https://sendum.com/pt300-package-tracker/who-buys.html and https://sendum.com/pt300-package-tracker/airline-approvals.html. Sendum has had actual notice of its infringement of the '793 Patent by no later than February 8, 2017 when it received TVIPR's letter advising Sendum of the '793 Patent and providing a detailed claim chart applying the '793 Patent to Sendum's PT300 line of tracking devices. Sendum has acted with specific intent to induce infringement.

95. Sendum has contributed to the infringement of at least claims 1, 2, 4, 11, 13 and 14 of the '793 Patent under 35 U.S.C. § 271(c) by, among other things, selling, offering for sale in

the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, encouraging, instructing and aiding others to use the PT300 and PT300D tracking devices in an infringing manner. Sendum has engaged in these activities knowing that the PT300 and PT300D tracking devices are especially made and adapted for use, and are in fact used, in a manner that constitutes infringement of the ‘793 Patent. The PT300 and PT300D tracking devices constitute material parts of the inventions described and claimed in the ‘793 Patent. The PT300 and PT300D tracking devices are not staple articles or commodities of commerce that are suitable for substantial non-infringing uses.

96. To the extent required by law, TVIPR has complied with the provisions of 35 U.S.C. § 287 with respect to the ‘793 Patent.

97. Sendum’s infringement of the ‘793 Patent has injured, and continues to injure, TVIPR.

98. Sendum’s infringement of the ‘793 Patent has been and continues to be willful, wanton, malicious, in bad faith, deliberate, consciously wrong and/or flagrant. Specifically, Sendum has sold, offered for sale and imported into the United States the PT300 and PT300D tracking devices, has encouraged, instructed and aided others to use the PT300 and PT300D tracking devices in an infringing manner, and has especially made and adapted for use the PT300 and PT300D devices in an infringing manner, although Sendum knew that its actions would constitute and result in infringement of the ‘793 Patent. Accordingly, this constitutes an egregious case of infringement typified by willful misconduct.

99. TVIPR is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

100. TVIPR will continue to be injured unless and until this Court enters an injunction prohibiting further infringement, inducement of infringement and contributory infringement.

COUNT V
SENDUM'S INFRINGEMENT OF THE '814 PATENT

101. TVIPR realleges and incorporates by reference as if fully set forth herein the allegations contained in paragraphs 1 through 100, above.

102. Sendum has indirectly infringed and continues to indirectly infringe at least claims 11, 14, 15 and 16 of the '814 Patent, either literally or under the doctrine of equivalents, by selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices that infringe at least claims 11, 14, 15 and 16 of the '814 Patent, and by inducing and contributing to the direct infringement of others.

103. Sendum has actively induced infringement of at least claims 11, 14, 15 and 16 of the '814 Patent under 35 U.S.C. § 271(b) by, among other things, selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, instructing and aiding others to use them in an infringing manner. Such direct infringers include customers such as security professionals, logistics professionals, quality professionals, regulatory professionals and customer service professionals that track products, including customers who use the PT300 and PT300D tracking devices to track products being shipped through United Airlines cargo. *See, e.g.*, https://sendum.com/pt300-package-tracker/who-buys.html and https://sendum.com/pt300-package-tracker/airline-approvals.html. Sendum has had actual notice of its infringement of the '814 Patent by no later than February 8, 2017 when it received TVIPR's letter advising Sendum

of the ‘814 Patent and providing a detailed claim chart applying the ‘814 Patent to Sendum’s PT300 line of tracking devices. Sendum has acted with specific intent to induce infringement.

104. Sendum has contributed to the infringement of at least claims 11, 14, 15 and 16 of the ‘814 Patent under 35 U.S.C. § 271(c) by, among other things, selling, offering for sale in the United States, and importing into the United States, the PT300 and PT300D tracking devices, including the PT300 and PT300D command modules, the Accessory Pack, the Basic Sensor Pack and the Advanced Sensor Pack, and by advertising, promoting, encouraging, instructing and aiding others to use the PT300 and PT300D tracking devices in an infringing manner. Sendum has engaged in these activities knowing that the PT300 and PT300D tracking devices are especially made and adapted for use, and are in fact used, in a manner that constitutes infringement of the ‘814 Patent. The PT300 and PT300D tracking devices constitute material parts of the inventions described and claimed in the ‘814 Patent. The PT300 and PT300D tracking devices are not staple articles or commodities of commerce that are suitable for substantial non-infringing uses.

105. To the extent required by law, TVIPR has complied with the provisions of 35 U.S.C. § 287 with respect to the ‘814 Patent.

106. Sendum’s infringement of the ‘814 Patent has injured, and continues to injure, TVIPR.

107. Sendum’s infringement of the ‘814 Patent has been and continues to be willful, wanton, malicious, in bad faith, deliberate, consciously wrong and/or flagrant. Specifically, Sendum has sold, offered for sale and imported into the United States the PT300 and PT300D tracking devices, has encouraged, instructed and aided others to use the PT300 and PT300D tracking devices in an infringing manner, and has especially made and adapted for use the PT300 and PT300D devices in an infringing manner, although Sendum knew that its actions would

constitute and result in infringement of the ‘814 Patent. Accordingly, this constitutes an egregious case of infringement typified by willful misconduct.

108. TVIPR is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

109. TVIPR will continue to be injured unless and until this Court enters an injunction prohibiting further inducement of infringement and contributory infringement

PRAYER FOR RELIEF

WHEREFORE, TVIPR ask this Court to enter judgment against Sendum and its subsidiaries, affiliates, officers, directors, agents, servants, employees and all persons in active concert or participation with them, granting the following relief:

A. An award of damages adequate to compensate TVIPR for the infringement that has occurred, together with prejudgment interest from the dates infringement of the ‘339 Patent, ‘682 Patent, ‘904 Patent, ‘793 Patent and ‘814 Patent began;

B. An award to TVIPR of all remedies available under 35 U.S.C. §§ 284 and 285;

C. A permanent injunction under 35 U.S.C. § 283 prohibiting further infringement, inducement of infringement and contributory infringement of the ‘339 Patent, ‘682 Patent, ‘904 Patent, and ‘793 Patent;

D. A permanent injunction under 35 U.S.C. § 283 prohibiting further inducement of infringement and contributory infringement of the ‘814 Patent; and

E. Such other relief as this Court or a jury may deem proper and just.

JURY DEMAND

TVIPR demands a trial by jury on all issues so triable.

Respectfully submitted,

/s/Richard B. Megley, Jr.
Richard B Megley, Jr.
(rmegley@leesheikh.com)
David J. Sheikh
(dsheikh@leesheikh.com)
Brian E. Haan
(bhaan@leesheikh.com)
LEE SHEIKH MEGLEY & HAAN
One North Franklin Street, Suite 3340
Chicago, IL 60606
(312) 982-0065
Fax: (312) 982-0071

Attorneys for TVIPR, LLC